CS385 Applied Database Management Systems Term Project

Problem description

Each group of students needs to identify a problem and develop a relational database system for it. Given the short time frame for the project, students are recommended to focus on simple problems which could be completed within 4 weeks.

Students need submit the following reports, all typed, for completion of each milestone

Milestone I (2%) (April 1st)
Before a database system is designed, detailed requirements, also known as specifications need to be identified. They include what problems are addressed and how questions are answered with the system. Inclusion of sample questions/problems will definitely help readers understand the scope of your project. Some data/information must be stored in database per client's request. They include entity sets, relationships and constraints, as well as attributes and data types of attributes. If functions/methods are used to derive the values of attributes, they are also discussed. Your proposal should

1. be 1-2 pages, double-spaced,
2. have title, student names,
3. provide specifications of database system,
4. describe how you obtain data
5. divide project into pieces, and set up timeline for the completion of each piece.

Milestone II (5%) (April 15th)
You should finish the design for the database. Your report includes

1. design in entity relationship diagram (ER model), take a screenshot of MySQL workspace,
2. relational model converted from ERD, e.g. Sudent(ID, name, major)

Final Report (18%) (April 29th)
Upon completion of the project, your will export database to scripts (queries) and submit to instructor. Your project will be graded on

1. the quality of database implementation (12%),
2. the written final report (4%)
3. project presentation (2%).

Final Report

Your final report will be 4-5 pages, double-spaced, and include the following sections.

Title
The title should precisely state the subject of the project.

Author Identification
Include your and your partner's names, emails, and the date of implementation.

Roles Each Team Member Plays

Each team member is expected to contribute to the project. Identify the roles each of you played in the project. Instructor will use the information to evaluate team member.

Summary of Project
A summary is a concise (approximately 200 words) paragraph that summarizes the motivation, scope, and conclusions of the project. It also describes the problem being studied, the approach to the solution, and conclusions.

Data
A description of dataset used/created in the project.

Design
This section is a very important in your project. You need describe the final design in both ER model and Relational Model converted from ERD. Make sure you include

1. a screenshot of entity relationship diagram, and
2. a list of relations with attributes, their data types and constraints

Use Cases
Showcases how your database system is used to solve the problems or address key inquires by including several queries as examples.